

Application Serial No.: 10/621,478  
Applicants: James Gary Pruett et al.  
Request for Continued Examination Submission  
Reply to Office Action Dated: January 9, 2006

**III. REMARKS**

United States Serial No. 10/621,478 was filed on July 17, 2003. In response to the Examiner's restriction requirement under 35 U.S.C. § 121, Applicants elected claims 42-52 for prosecution in the present application. Claims 1-41 have been withdrawn from prosecution. Claim 42 has been amended by the present response. In view of the amendment and remarks set forth herein, Applicants respectfully request reconsideration and allowance of claims 42-52.

**Claim 42**

Claim 42 has been amended to indicate a continuous roll composite wound over itself. The amendment to claim 42 is fully supported by the specification. The specification discloses that "the starting substrate material 30 is wound on the feed reel 32." See page 13, lines 31-32. Reference number 32 of Fig. 1 refers to a feed reel of starting substrate material, which is shown by both solid and dashed lines. This solid and dashed lines show a side view of the feed reel of substrate material having an effective diameter that changes from the larger dashed view to the smaller solid view as the substrate material is unwound from the feed reel and is drawn into the process furnace. Such a reduction in diameter is the result of removal of layers of substrate material from the original continuously wound roll as the layers are unwound from the feed reel 32.

The specification further discloses that "...product 31 is then wound...on the take-up reel 34." See page 14, lines 2-3. Reference number 34 of Fig. 1 refers to a take-up reel shown by both solid and dashed lines. This solid and dashed lines show a side view of the take-up reel having an effective diameter. The diameter of the take-up reel changes from the smaller solid view to the larger dashed view as composite material is wound onto it. Such an increase in diameter is the result of addition of layers of the continuous composite material as the product exits the process furnace and is wound onto the take-up reel.

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The specification also discloses “Substrate materials, such as sheets, fabrics and felts, which can be continuously fed through the process furnace from a *stock roll* and taken up at the end of the process with another roll.” Specification Page 7, lines 13-15. The term “stock roll” refers to an accumulated supply of material wound over itself to form a roll. In addition, the specification describes the material as a wound roll composite. (“wound on the feed reel” and “wound...on the take-up reel” Specification Page 13, lines 31-32; Specification Page 14, lines 2-3).

Thus, the originally filed specification discloses that a material may be wound by more than a single rotation about an axis, such as the axis of the take-up reel 34, to form a wound roll. As such, the originally filed specification clearly discloses a composite material that is wound over itself to yield a continuous roll.

#### 35 U.S.C. §102(b) Rejection

Claims 42-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,155,432 for the reasons of record in the Office Action. Applicants respectfully traverse the rejection of claims 42-52.

To establish anticipation of a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in the single prior art reference. See Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). While U.S. Patent No. 6,155,432 discloses open cylinders and tube, it does not disclose a composite material in the form of continuous roll wound over itself, and it does not disclose the mass variation of the pyrocarbon of the composite material. As all of the limitations of claim 42 are not disclosed by U.S. Patent No. 6,155,432, anticipation does not apply. Applicants therefore respectfully request that this rejection be withdrawn.

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35 U.S.C. §103 Rejection

Claims 42-52 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,155,432 for the reasons of record in the Office Action. Applicants respectfully traverse the rejection of claims 42-52.

To establish a *prima facie* case of obviousness under § 103 there must be (1) a suggestion or motivation to modify a reference, (2) a reasonable expectation of success, and (3) the modification of the reference must teach or suggest all claimed limitations. *In re Vaeck*, 947 F.2d 488 (Fed.Cir. 1991). U.S. Patent No. 6,155,432 only describes “filter media . . . constructed in the form of a structure selected from the group consisting of papers, felts, needled felts, fabrics, flat, shaper or corrugated plates, tubes, open cylinders and corrugated or pleated tubes and cylinders.”). Absolutely nowhere does U.S. Patent No. 6,155,432 disclose or suggest that these open or pleated cylinders and tubes may be in the form of roll composites comprising continuous material wound over itself. In fact, the cited reference provides no further discussion of the construction of the cylinders and tubes, and simply makes no mention of a continuously wound roll composite whatsoever. The teaching of a continuous wound composite roll material is *only* found in the present application. Because the limitations of claim 42 are not suggested or motivated by U.S. Patent No. 6,155,432, the rejection of claims 42-52 for obviousness is not proper. Applicants therefore respectfully request that this rejection be withdrawn.

In view of the above remarks, Applicants respectfully request that the rejections under 35 U.S.C. §§ 102 and 103 be withdrawn, and that the Examiner issue a formal notice of allowability directed to claims 42-52.

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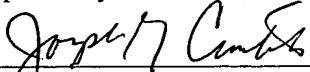
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Should the Examiner have any questions, Applicants' undersigned attorney would welcome a telephone call.

Respectfully submitted,



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